ABSTRACT OF THE DISCLOSURE

A method for extracting digests, reformatting, and automatic monitoring of structured online documents based on visual programming of document tree navigation and transformation is provided for structured online documents such as HTML, XML, SGML

5 document, or any other document that has internal structure that can be represented by a tree. A digest of an online document is a collection of fragments of this document which are of interest to a user. The system is based on a technique whereby a user selects a fragment of an online document shown in a source window and copies this fragment to the target window that contains the reformatted digest. The system generates a sequence of web site navigation commands, online document tree navigation commands, and "Copy Fragment" commands that cause the assembly of the reformatted digest in the target window. The user can later ask the system to replay the generated commands, thus causing automatic creation of the reformatted digest of the changed version of the online document. Therefore, when content of the original document changes, the change is automatically propagated to the digest document. This allows implementation of a simple automatic monitoring of online documents or their reformatted digests. The digest document is usually much smaller than the original document, and usually it does not contain computationally intensive and bandwidth intensive multimedia elements such as graphics, sounds, applets, and scripts. This considerably lowers the bandwidth and processing power requirements for user agents that display document digests. Therefore digest documents

20 can be displayed by user agents running on wireless and portable computing devices that have bandwidth and computational power limitations.